

Stainless Steel / Gas Shielded / Metal Cored

**PRODUCT DATA SHEET** 

EC409Nb

### **FEATURES**

- Increased level of columbium (Cb), also known as niobium (Nb), to prevent sensitization.
- Enhanced weldability on components with excessive surface contaminants/lubes.
- Metal cored construction inherently provides better welding performance compared to solid wires.
- Designed to weld exhaust system components of similar composition, ~12 wt% chromium (Cr).

#### CONFORMANCES

AWS A5.22

ASME SFA 5.22 EC409Nb

# DIAMETERS (in (mm))

0.045 (1.2), 0.052 (1.3), 1/16 (1.6)

#### **POSITIONS**



#### **SHIELDING GAS**

Ar + 0.5-5% CO2, Ar + 0.5-3% O2 Flow Rate: 40 - 50 CFH

#### **POLARITY**

Direct Current Electrode Positive (DCEP)

### **TYPICAL WELD DEPOSIT CHEMISTRY (WT%)**

Shielding Gas	С	Cr	Cu	Mn	Мо	Nb	Ni	P	S	Si
Argon	0.02	11.6	0.03	0.57	<0.01	0.61	0.02	0.006	0.008	0.51



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Notice: Be sure to follow all your employers safety practices, policies and procedures when using this product. Refer to CSA W117.2 and ANSI Z49.1 Safety in Welding, Cutting and Allied Processes for further information and the manufactures SDS sheet. The results reported are based upon testing of the product under controlled laboratory conditions in accordance with American Welding Society Standards. Actual use of the product may produce different results due to varying conditions. An example of such conditions would be electrode size, plate chemistry, environment, weldment design, fabrication methods, welding procedure and service requirements. Thus the results are not guarantees for use in the field. The manufacturer disclaims any warranty of merchantability or fitness for any particular purpose with respect to its products.

#### **RECOMMENDED WELDING PARAMETERS \*\***

Diameter in (mm)	Shielding Gas	Position	WFS* in/min (m/min)	Amps	Volts	CTWD* in (mm)
0.035 (0.9 mm)	98% Ar/2% O2	Flat & Horizontal	315 (8.0)	150	20	1/2 (13)
0.045 (1.2 mm)	98% Ar/2% O2	Flat & Horizontal	280 (7.1)	200	20	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	350 (8.9)	220	21	1/2 - 5/8 (13 - 16)
		Flat & Horizontal	400 (10.2)	250	23	5/8 (16)
		Flat & Horizontal	475 (12.1)	275	25	5/8 (16)
0.052 (1.3 mm)	98% Ar/2% O2	Flat & Horizontal	225 (5.7)	215	20	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	350 (8.9)	280	23	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	425 (10.8)	300	25	3/4 (19)
1/16 (1.6 mm)	98% Ar/2% O2	Flat & Horizontal	225 (5.7)	260	21	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	265 (6.7)	285	22	5/8 - 3/4 (16 - 19)
		Flat & Horizontal	300 (7.6)	310	23	3/4 - 1 (19 - 25)
		Flat & Horizontal	350 (8.9)	335	25	3/4 - 1 (19 - 25)

## PACKAGING (lbs (kgs))

33 (15) Spools, 60 (27.2) Coils, 500 (226.8) Round Drum, 800 (362.9) Hex Drum, 900 (408.2) Hex Drum

## **STORAGE AND HANDLING**

All products should be stored in original packaging, in dry conditions and handled with care. For more information refer to our website.



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<sup>\*</sup> WFS = Wire Feed Speed, CTWD = Contact Tip To Work Distance
\*\*The parameters listed are recommended starting points of operation and the ranges for amperage, wfs, and voltage could be extended based on fitness for application. For products with "allposition" capability, as determined and listed in classification, the position recommendation can be determined based on operator skill and material thickness and isn't limited to the listing.

<sup>\*</sup>Some packaging options may not be available depending on diameter and product. Special package options may be available upon request.